

REMARKS

This Amendment is submitted in reply to the final Office Action mailed on May 26, 2010. A Request for Continued Examination ("RCE") and a Petition for a three month extension of time is submitted herewith this Amendment. The Director is authorized to charge \$810.00 for the RCE and \$1,110.00 for the Petition for a three month extension of time and any additional fees that may be required, or to credit any overpayment to Deposit Account No. 02-1818. If such a withdrawal is made, please indicate the Attorney Docket No. 3712036-00719 on the account statement.

Claims 1-5 and 7-21 are pending in the application. Claim 6 was previously canceled without prejudice or disclaimer. In the Office Action, Claims 1-5 and 7-21 are rejected under 35 U.S.C. §103. In response, Applicants have amended Claims 1-5, 7-8 and 11-18, and have canceled Claims 9-10 and 19. The amendments do not add new matter and are supported in the specification at, for example, page 8, lines 7-12; page 10, lines 19-22. In view of the amendments and/or for at least the reasons set forth below, Applicants respectfully submit that the rejections be reconsidered and withdrawn.

In the Office Action, Claims 1-2, 4, 7, 9-11 and 13-21 are rejected under 35 U.S.C. §103(a) as being unpatentable over EP 0 791 296 to Wood et al. ("*Wood*"). In contrast, Applicants respectfully submit that *Wood* is deficient with respect to the present claims.

Currently amended independent Claims 1, 13 and 18 recite, in part, a beverage base comprising less than 0.05% ethanol and a fermented coffee component having a modulated coffee aroma with fruity and/or floral notes due to the fermentation of the coffee aroma, the coffee aroma also having a ratio of 2- and 3-methylbutanol over 2- and 3-methylbutanal of greater than 1, and a ratio of thioacetates over thiols of greater than 0.5. Currently amended independent Claim 14 recites, in part, a process for providing a coffee beverage base comprising subjecting the incubated coffee component to fermentation at a temperature below 22°C and without aeration to generate a fermented coffee component that has a fruity and/or floral note due the fermentation of the coffee aroma, while controlling the fermentation conditions to substantially prevent the generation of alcohol and provide a coffee beverage base having less than 0.05% ethanol. The amendments do not add new matter and are supported in the specification at, for example, page 8, lines 7-12; page 10, lines 19-22. Applicants have

surprisingly found that the fruity and/or floral notes can be generated, thus providing a beverage with a unique aroma signature wherein harsh coffee aroma is balanced with the fruity and/or floral aroma notes. Further, it has surprisingly been found that it is possible to provide a beverage base comprising a fermented coffee component which has a modulated coffee aroma and which is a non-alcoholic drink while at the same time retaining the coffee character of the coffee component. The beverage is refreshing due to its unique aroma profile and stimulating due to the caffeine content in the beverage.

According to the invention, the development of alcohol during the fermentation can be inhibited in particular by controlling the temperature and duration of fermentation, selecting suitable yeast or bacterial strains and this allows the production of a beverage base, which comprises substantially no alcohol. Surprisingly, the fermented beverage obtains a particular desirable aroma under these process conditions. For example, a pleasant fruity and/or floral aroma, which in a pleasant way complement the coffee aroma. Another advantage of the process of the invention is that it allows a fermented beverage to be generated in a relatively short fermentation process. Fermentation processes are generally known to be extensive due to long time the fermentation process takes, for example, in the range of 15 to 27 hours. The fermentation process of the present invention may take less than 8 hours, preferably less than 6 hours, but more than 4 hours in order to avoid ethanol formation while allowing development of fruity aroma and conversion of some coffee aroma compounds. See, specification, page 11, paragraph 51-page 12, paragraph 50.

An additional advantage is that a beverage may be provided which, although fermented, does not comprise acetic acid in amounts higher than was already in the coffee base. Thus, such beverage does not have the unpleasant acidic taste found in some fermented beverages. See, specification, page 4, paragraph 12-page 5, paragraph 13. In contrast, Applicant respectfully submits that *Wood* fails to disclose or suggest every element of the present claims.

For example, *Wood* fails to disclose or suggest a beverage base comprising less than 0.05% ethanol and a fermented coffee component having a modulated coffee aroma with fruity and/or floral notes due to the fermentation of the coffee aroma, the coffee aroma also having a ratio of 2- and 3-methylbutanol over 2- and 3-methylbutanal of greater than 1, and a ratio of thioacetates over thiols of greater than 0.5 as required, in part, by independent Claims 1, 13 and

18. *Wood* also fails to disclose or suggest a process for providing a coffee beverage base comprising subjecting the incubated coffee component to fermentation at a temperature below 22°C and without aeration to generate a fermented coffee component that has a fruity and/or floral note due the fermentation of the coffee aroma, while controlling the fermentation conditions to substantially prevent the generation of alcohol and provide a coffee beverage base having less than 0.05% ethanol as required, in part, by independent Claim 14.

Instead, *Wood* is directed to a process for the preparation of a fermented drink that may be prepared from coffee and includes the use of a yeast strain specifically for the purpose of producing ethanol and a bacterial strain specifically for the purpose of acidifying an aqueous extract. See, *Wood*, Abstract; page 2, lines 26-33. Indeed, *Wood* states that “[t]here may be inoculated into the aqueous extract, for the fermentation in one or more stages . . . a yeast strain . . . so as to produce ethanol.” See, *Wood*, page 2, lines 26-30. The Patent Office even admits that “*Wood et al.* is silent as to the content of ethanol in the coffee beverage base below 0.05%.” See, Office Action, page 3, lines 20-21.

Although *Wood* mentions that the level of ethanol and acetic acid can be reduced by reducing the temperature at the end of fermentation, *Wood* does not disclose the possibility or desirability of completely avoiding the formation of ethanol (to the extent practically possible) by fermentation at a temperature below 22°C and without aeration during the whole fermentation process, as is required, in part, by the present claims. Indeed, *Wood* discloses using temperatures between 27-32°C during fermentation. This is entirely distinguishable from the present claims, which do not allow temperatures to exceed 22°C during the whole fermentation process.

Further, the Patent Office admits that “the references do not specifically disclose . . . the ratio of 2- and 3-methylbutanol over 2- and 3-methylbutanal [or] the ratio of thioacetates over thiols and foam properties” but asserts that the claimed ratios “would have been expected to be as claimed absent any clear and convincing evidence and/or arguments to the contrary.” See, Office Action, page 5, line 20-page 6, line 4. However, as discussed above, the fermentation processes by which the beverages of *Wood* are manufactured are entirely different than those presently claimed. Indeed, the temperatures and times for the fermentation of *Wood* are not the same as those used with the present beverage bases. Moreover, *Wood* expressly discloses the use of aeration during fermentation. See, *Wood*, Examples. As a result, the amounts of ethanol and

acetic acid produced during fermentation are also distinct. Accordingly, since the Patent Office admits that the beverage of *Wood* fail to disclose the present ratios, *Wood* fails to disclose or suggest each and every element of the present claims.

Further, *Wood* fails to disclose or suggest the time, temperature, and aeration restrictions for the present fermentation. For example, *Wood* discloses that the fermentation may take place i) in one step, wherein the yeast and bacteria are added to the aqueous extract together and fermented for 2-10 hours at 27-32°C, or ii) in two steps, wherein the first step includes yeast being added to the aqueous extract and fermented for 15-27 hours at 27-32°C, and the second step includes bacteria being added to the aqueous extract and fermented for 3-9 hours at 20-32°C. *Wood* also expressly discloses that the fermentation includes an aeration step. See, *Wood*, Examples. Accordingly, in either process of *Wood*, the temperatures during fermentation greatly exceed those utilized in the fermentation processes of the present claims. Additionally, the fermentation process of *Wood* will result in much greater loss of aroma compounds since aeration strips off aroma compounds during fermentation.

The Patent Office also asserts that the starting materials and methods of the present claims and *Wood* are the same and that, as such, many characteristics of the product obtained by the reference method would have been an inherent result of the process disclosed therein. See, Office Action, page 6, lines 4-10. However, Applicants note that the Patent Office even admits that *Wood* fails to disclose or suggest many of the limitations of the presently claimed beverage bases and processes for making same, as discussed above. Because the fermentation processes of *Wood* is entirely distinguishable from the fermentation of the present beverage bases, Applicants respectfully submit that the compounds and processes of *Wood* result in entirely different compounds and processes than the present claims.

Further, to satisfy the test for inherency, the Patent Office would be required to show that the processes of *Wood* necessarily (i.e., always or automatically) provide for the characteristics of the presently claimed beverage bases. That condition simply is not met under the present circumstances. The fact that a certain result or characteristic *may* occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. See, MPEP 2112. *In re Rijckaert*, 9 F.3d 1531, 1534 (Fed. Cir. 1993). The Patent Office has failed to provide a basis in fact or any technical reasoning to support any possible determination that the processes

of *Wood* necessarily (i.e., always or automatically) provide for the characteristics of the presently claimed beverage bases. Further, since the compositions of the cited references are not the same as the presently claimed compositions, the compositions of *Wood* cannot inherently provide the same benefits as the claimed compositions. As such, Applicants respectfully submit that *Wood* fails to disclose or suggest each and every element of the present claims.

Applicants also respectfully submit the skilled artisan would have no reason to modify *Wood* to arrive at the present claims because *Wood* expressly teaches away from the present claims. For example, and as discussed above, *Wood* is directed to a process for the preparation of a fermented drink that may be prepared from coffee and includes the use of a yeast strain specifically for the purpose of producing ethanol and a bacterial strain specifically for the purpose of acidifying an aqueous extract. See, *Wood*, Abstract; page 2, lines 26-33. Indeed, *Wood* states that “[t]here may be inoculated into the aqueous extract, for the fermentation in one or more stages . . . a yeast strain . . . so as to produce ethanol.” See, *Wood*, page 2, lines 26-30.

Although *Wood* mentions that the level of ethanol and acetic acid can be reduced by reducing the temperature at the end of fermentation, *Wood* does not disclose the possibility or desirability of completely avoiding the formation of ethanol (to the extent practically possible) by fermentation at a temperature below 22°C and without aeration during the whole fermentation process, as is required, in part, by the present claims. Indeed, *Wood* discloses using temperatures between 27-32°C during fermentation, and the use of aeration in every, single Example of *Wood*. This is entirely distinguishable from the present claims, which do not allow temperatures to exceed 22°C, or the use of aeration, during the whole fermentation process. Accordingly, *Wood* teaches away from the fermentation processes of the present claims.

For at least these reasons, Applicants respectfully submit that *Wood* fails to render the present claims obvious.

Accordingly, Applicants respectfully submit that the obviousness rejection with respect to Claims 1-2, 4, 7, 9-11 and 13-21 be reconsidered and withdrawn.

In the Office Action, Claims 3, 5, 8 and 12 are rejected under 35 U.S.C. §103(a) as being unpatentable over *Wood* in view of U.S. Patent No. 5,736,182 to Jimenez et al. (“*Jimenez*”). In view of the amendments and/or for at least the reasons set forth below, Applicants respectfully submit that the cited references are deficient with respect to the present claims. Applicants

respectfully submit that the patentability of independent Claim 1, as previously discussed, renders moot the obviousness rejection of Claims 3, 5, 8 and 12 that depend from Claim 1. In this regard, the cited art fails to teach or suggest the elements of Claims 3, 5, 8 and 12 in combination with the novel elements of Claim 1.

For at least these reasons, Applicants respectfully submit that the obviousness rejection of Claims 3, 5, 8 and 12 is improper and that the cited references fail to disclose or suggest each and every element of the presently claimed subject matter.

Accordingly, Applicants respectfully request that the obviousness rejection of Claims 3, 5, 8 and 12 be reconsidered and withdrawn.

For the foregoing reasons, Applicants respectfully request reconsideration of the above-identified patent application and earnestly solicit an early allowance of same. In the event there remains any impediment to allowance of the claims which could be clarified in a telephonic interview, the Examiner is respectfully requested to initiate such an interview with the undersigned.

Respectfully submitted,

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Dated: November 22, 2010